



# Remote Patient Management to Support Clinical Outcomes, Healthcare Utilization, and Practice Capacity: A Demonstration Project in Georgia

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## BACKGROUND

U.S. maternity care systems are experiencing increasing clinical demand, limited clinic capacity, and rising costs, particularly for patients with chronic disease and barriers to in-person care.<sup>1</sup> A one-size-fits-all approach is too restrictive for some low-risk patients, leading to overutilization of a valuable resource, whereas high-risk patients may show significant disease progression under standard follow-up visits.<sup>2</sup>

**Remote patient monitoring (RPM)** has emerged as a strategy to extend prenatal care into the home while preserving safety and improving access.<sup>3</sup> Although the interest and need for RPM are growing, there remains limited real-world experience demonstrating how these programs can be integrated into established routine obstetric care in both outpatient and hospital settings. **Marani Health's M•care System** operationalizes the Pregnancy Medical Home model and ACOG's PATH framework by combining risk stratification, structured care pathways, and 24/7 access to an interdisciplinary team with remote biometric monitoring and mental health/Social Determinants of Health (SDoH) screening.

### Objectives:

To evaluate, in a real-world safety-net setting, whether an RPM for obstetric patients:

- **Improves clinical management and access to care**
- **Reduces avoidable acute care use** (ED visits and readmissions)
- **Creates a positive financial return on investment (ROI)**
- **Improves care for patients** through more timely and robust clinical data for providers

## STUDY DESIGN & METHODS

### Setting & Design

- Single-center, prospective demonstration project at the Medical College of Georgia, supported by Catalyst by Wellstar.
- Ongoing enrollment targeting **170 pregnant patients** managed via remote patient management using the Marani platform.

### Eligibility

- Pregnant patients with **≥2 chronic conditions** (e.g., chronic or gestational hypertension, diabetes, obesity, mental health conditions) **and/or access barriers** as determined by an obstetric provider.

### Intervention (Marani RPM Program)

- Connected devices: cellular blood pressure cuff, weight scale, and glucometer
- Daily or near-daily remote capture of vital signs and symptoms via the Marani platform
- Risk-stratified alerts routed to an interdisciplinary team (Population Health nurses, OB, and MFM physicians)
- Protocol-driven remote titration of antihypertensives and diabetes medications
- Embedded screening workflows for:
  - Postpartum depression and anxiety
  - Social determinants of health
- Bidirectional messaging between patients and care teams to replace or defer select in-person visits when clinically appropriate

## OUTCOMES

### Clinical Care & Patient Management

- **Improved remote management of hypertension and diabetes**
  - Remote titration of medications for gestational hypertension and gestational diabetes allowed more rapid adjustments without waiting for in-person visits.
- **Stable or improved safety while shifting care out of the clinic**
  - implementation of RPM did **not require an increase in overall hospitalizations**
  - faster escalation to L&D or higher-level care when warranted, rather than relying on patient recall.
- **Early and proactive mental health support**
  - Integration of postpartum mental health screening into the RPM workflow allowed **earlier identification of depression and anxiety**

### Healthcare Utilization & Capacity

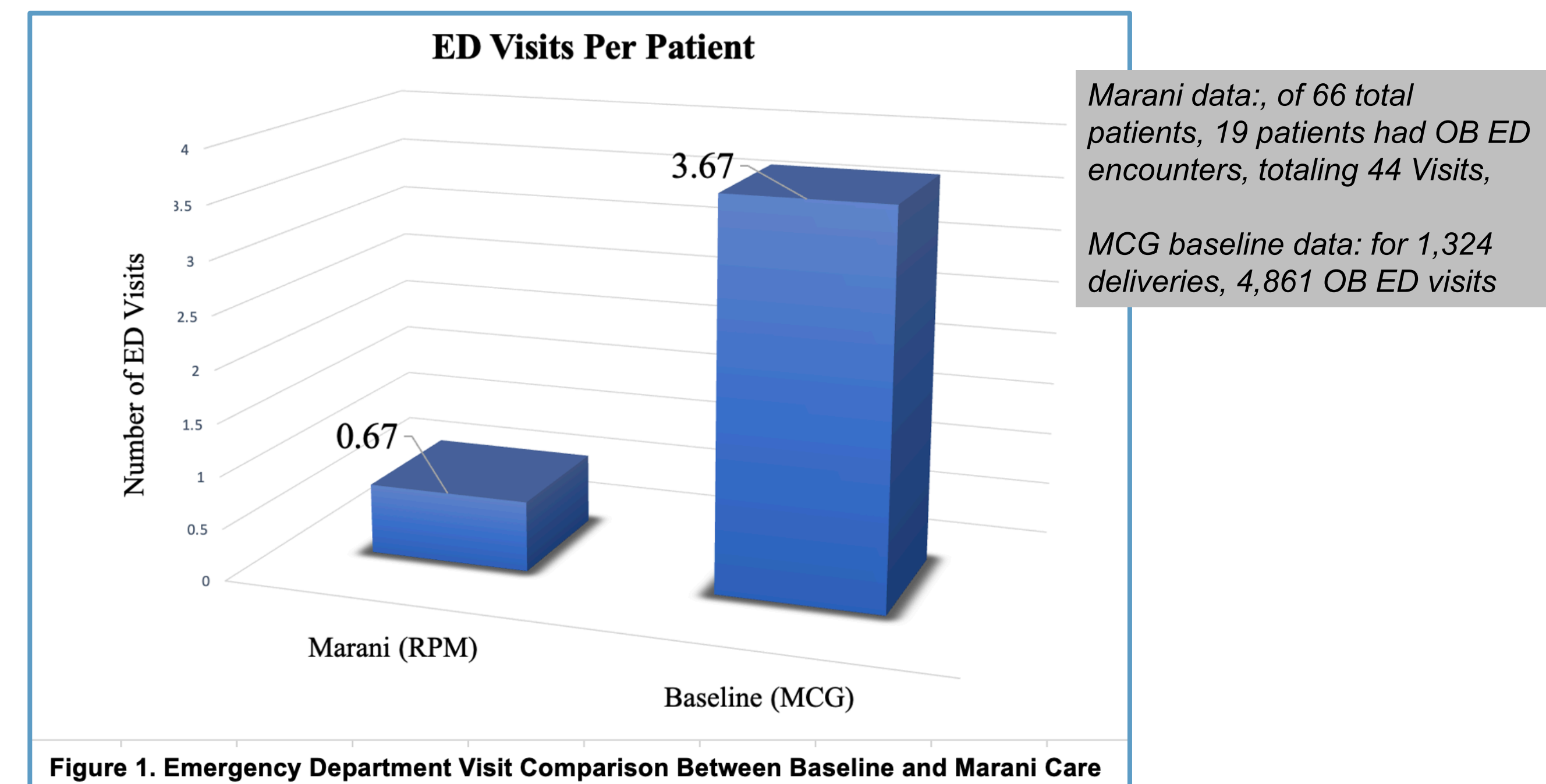


Figure 1. Emergency Department Visit Comparison Between Baseline and Marani Care

### Financial Outcomes & ROI

Table 1. Modeled Savings With Marani-Enabled RPM (per 1,000 pregnancies)

Outcome Category	Savings*
NICU	\$1.5–\$3.2M
Cesarean Delivery	> \$1.2M
ED Visits & Hospitalizations	≈ 1.4M
Gestational Diabetes:	≈ \$90K

\*Estimated savings are modeled per 1,000 pregnancies using historical utilization data and published cost assumptions; actual savings may vary

### Program Costs & Revenues

- **Program costs** (devices + SaaS) are estimated at **≈\$940K per 1,000 pregnancies**, assuming ~8–9 months on program, universal BP cuff and scale, and ~10% receiving glucometers and supplies
- **Reimbursement** via RPM and CCM/PCM codes (99453, 99454, 99457, 99458, 99490, 99439, 99426, 99427, 96127) provides a recurring revenue stream

## CONCLUSIONS

- A structured RPM using the Marani platform is **feasible in a high-risk, predominantly Medicaid obstetric population** and aligns with Pregnancy Medical Home and ACOG PATH frameworks
- **Remote titration of medications** and **real-time monitoring** can optimize outpatient care without increasing hospitalizations and may **prevent some ED visits and admissions**
- Embedded mental health and SDoH screening workflows allow **earlier identification and treatment of postpartum mental health conditions**
- Economic modeling, using local cost data and Georgia-specific reimbursement rates, demonstrates a **meaningful ROI (~3:1)** at scale, driven by both cost avoidance and RPM/CCM reimbursement
- These interim findings support Marani-enabled RPM as a **clinically effective and financially sustainable model** for expanding capacity, improving outcomes, and reducing the total cost of maternity care in resource-constrained systems

## FUTURE STEPS

- Complete enrollment and full quantitative comparison with historical cohorts (ED visits, readmissions, NICU days, C-section rates)
- Stratified analyses by payer, race/ethnicity, and SDoH to evaluate **health equity impact**
- Prospective testing of alternative prenatal visit schedules that intentionally shift more care to remote management while preserving SMFM/ACOG safety standards

## REFERENCES

1. American College of Obstetricians and Gynecologists. Remote patient monitoring in obstetric care. *ACOG Clinical Guidance*.
2. Brown HL, et al. Telehealth and remote monitoring in obstetric care: Opportunities and challenges. *American Journal of Obstetrics & Gynecology*.
3. Hirschberg A, et al. Implementation of remote patient monitoring for high-risk pregnancy management. *Journal of Maternal-Fetal & Neonatal Medicine*.

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